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January 13, 2003

Mr. Scot Cullen, Chief Electric Engineer
Public Service Commission
610 N. Whitney Way
P.O. Box 7854
Madison, WI 53707-7854

RE: In the Matter of Filing Reporting Requirements for Appropriate Inspection and Maintenance, PSC Rule 113.0607(6)

Dear Mr. Cullen:

Enclosed for filing are 3 copies of Lodi Utility's report to the commission, submitted every two years, showing compliance with its Preventative Maintenance Plan.

Very truly yours,

Marv Dolphin
Utilities Superintendent

Enclosures

TWO YEAR REPORT DOCUMENTING COMPLIANCE WITH THE PREVENTATIVE MAINTENANCE PLAN

Lodi Utilities

FILING DEADLINE
FEBRUARY 1, 2003

January 13, 2003

Marv Dolphin
Utility Superintendent
113 South Main Street
Lodi, WI 53555
608-592-3246
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This report format was prepared by the MEUW work group for PSC Rule 113.0607 for use by the 82 municipal electric utilities in Wisconsin and endorsed by PSC staff as meeting the requirements of Rule PSC 113.0607.

I Reporting Requirements: PSC 113.0607(6) states;

Each utility shall provide a periodic report to the commission showing compliance with its Preventative Maintenance Plan. The report shall include a list of inspected circuits and facilities, the condition of facilities according to established rating criteria, schedules established and success at meeting the established schedules.

II Inspection Schedule and Methods:

SCHEDULE:	MONTHLY	ANNUAL	EVERY 5 YEARS
Transmission (≥69Kv)	NA	NA	NA
Substations	X	X	
Distribution (OH & UG)	X	X	X

METHODS: Five criteria groups will be used to complete the inspection of all facilities.

1. IR – infrared thermography used to find poor electrical connections and/or oil flow problems in equipment.
2. RFI - Radio Frequency Interference, a byproduct of loose hardware and connections, is checked using an AM radio receiver.
3. SI – structural integrity of all supporting hardware including poles, crossarms, insulators, structures, bases, foundations, buildings, etc.
4. Clearance – refers to proper spacing of conductors from other objects, trees and conductors.
5. EC – equipment condition on non-structural components such as circuit breakers, transformers, regulators, reclosers, relays, batteries, capacitors, etc.

Distribution facilities will be inspected by substation circuits on a 5-year cycle such that the entire system will be inspected every 5 years. Inspector instructions for inspecting all facilities and forms are included in the plan.

III Condition Rating Criteria

This criterion, as listed below, establishes the condition of a facility and also determines the repair schedule to correct deficiencies.

0) Good condition
1) Good condition but aging
2) Non-critical maintenance required – normally repair within 12 months
3) Priority maintenance required – normally repair within 90 days
4) Urgent maintenance required – report immediately to the utility and repair normally within 1 week

IV Corrective Action Schedule

The rating criteria as listed above determine the corrective action schedule. Maintenance rated Priority or above is completed within the day. Maintenance rated non-critical and below

is completed within the day if possible and within 7 days unless materials must be ordered. Those repairs are made within 2 days of equipment delivery.

V Record Keeping

All inspection forms and records will be retained for a minimum of 10 years. The inspection form contains all of the required critical information i.e. inspection dates, condition rating, schedule for repair and date of repair completion.

VI Reporting Requirements

A report and summary of this plan's progress will be submitted every two years with the first report due to the Commission by February 1, 2003. The report will consist of a cover letter documenting the percent of inspections achieved compared to the schedule and the percent of maintenance achieved within the scheduled time allowance.

VII Inspected Circuits and Facilities

Circuit # and description	Substation
Circuit # 5 was inspected in 2001. All underground pedestals and transformers and elbows were checked visually and with infrared. All locking devices were checked and replaced if needed. All overhead was checked with infrared. Circuit #5 is 75% completed through 2002. All underground switchgear was infrared inspected in 2001. We rebuilt 75% of Circuit #6 in 2002 including new conductor, poles and equipment.	Both the Industrial Park and Main (Water Street) substations are inspected monthly and annually. During the annual inspection oil and all equipment is checked and infrared inspections are completed. In 2001 the Circuit 1 recloser at the Main Substation (Water Street) was found to be defective and replaced by A.C. Engineering. The West voltage regulator was defective and replaced and the East voltage regulator had a heated connection discovered in the IR inspection that was repaired.
Circuit 2 is new for 2002. It includes 2.5 miles of conductor, 33 new metal poles along with underground and overhead equipment. Circuits #3 and #4 were inspected in 2002. All underground pedestals and transformers and elbows were checked visually and with infrared. All locking devices were checked and replaced if needed. All overhead was checked with infrared.	In 2002 all equipment tested in both substations was found to be in good condition during the monthly and annual inspections.

VIII Scheduling Goals Established and Success of Meeting the Criteria:

It the goal of Lodi Utilities to complete all monthly and annual substation inspections on time. We will inspect 20% of the distribution system. In addition, we expected to complete all scheduled maintenance resulting from the inspections within the prescribed time periods specified in the rating criteria.

All of the inspection goals were met or exceeded. In the reporting years 2001-2002, 75% of the distribution system was inspected rather than 40%. No urgent maintenance items were found. Of the non-critical maintenance items found, including ground molding, down guys and markers, signs and tree trimming, all were completed on time.

IX Facility condition – rating criteria:

During the past two years, 75% of the distribution system was inspected and all substation inspections were completed on time. Of the items found requiring maintenance, all were repaired before they were responsible for an outage to customers. Storm related outages have been minimal and only accounted for 3 outages affecting 15 residential customers for a total of 5 hours and 10 minutes. One outage in 2002 resulted from a contractor cutting into an underground line. The outage lasted 2 hours and effected 40 residential customers. Typically short outages have occurred because of animal problems and the occasional auto into a pole. Most of the system is less than 20 years old and based on the rating criteria is in good condition. Circuit #2 was rebuilt in 2001 and is 75% new. Circuit #5 is 50% new since 2001-2002 and Circuit #6 is 75% new since 2001. The overall condition of the distribution system is good.

New work is scheduled for Circuit #1. Work includes 1600 feet of new conductor and will be changed from over head to underground along Highway 113. A third substation is being designed to be located next to the existing substation on Water Street. The new substation will be needed when a voltage change is made from 4 kV to 12 kV.